

CLAIMS

What is claimed is:

1. A vehicle seat recliner and folding latch assembly, comprising:
 - a lower quadrant disc;
 - a slide-pin subassembly supported on said lower quadrant disc for pivotal displacement between a first position and a second position, said slide-pin subassembly operable to be locked in said first and second positions; and
 - a recliner disc supported by said slide-pin subassembly for pivotal displacement relative thereto, wherein said recliner disc includes an engagement edge engaging said slide-pin subassembly and adapted to lock said slide-pin subassembly in said first and second positions.
2. The assembly of claim 1 wherein said slide-pin subassembly includes a housing plate supporting a lock-pin in an elongated slot, said lock pin displaceable within said slot between a locked position and an unlocked position.
3. The assembly of claim 2 wherein said lower quadrant disc includes a first thrust shoulder adapted to unlock said slide-pin subassembly from said first position and a second thrust shoulder adapted to unlock said slide-pin subassembly from said second position.

4. The assembly of claim 3 wherein said lower quadrant disc includes a cammed surface disposed between said first and second thrust shoulders for engaging said lock pin when said lock pin is in said unlocked position.

5. The assembly of claim 2 wherein said engagement edge of said recliner disc includes a first locking shoulder adapted to lock said slide-pin subassembly in said first position and a second locking shoulder adapted to lock said slide-pin subassembly in said second position.

6. The assembly of claim 5 wherein said engagement edge includes a void edge for receiving a portion of said slide-pin subassembly when said lock pin is in said unlocked position.

7. The assembly of claim 2 wherein said lock-pin is in constant engagement with said lower quadrant disc.

8. The assembly of claim 2 wherein said lock-pin has a generally octagonal cross-section.

9. The assembly of claim 1 wherein said slide-pin subassembly includes a roller bearing engaging said engagement edge of said recliner disc.

10. The assembly of claim 1 wherein said lower quadrant disc further includes an arcuate cavity receiving a stop pin attached to said slide-pin subassembly, said stop pin adapted to engage a first end of said cavity when said slide-pin subassembly is in said first position and a second end of said cavity when said slide-pin subassembly is in said second position.

11. A vehicle seat assembly, comprising:
 - a seat bottom;
 - a seat back; and
 - a vehicle seat recliner and floor latch subassembly, including:
 - a lower quadrant disc;
 - a slide-pin subassembly supported on said lower quadrant disc for pivotal displacement between a first position and a second position, said slide-pin subassembly operable to be locked in said first and second positions; and
 - a recliner disc attached to said seat back and supported by said slide-pin subassembly for pivotal displacement relative thereto, wherein said recliner disc includes an engagement edge engaging said slide-pin subassembly and adapted to lock said slide-pin subassembly in said first and second positions.
12. The assembly of claim 11 wherein said slide-pin subassembly includes a housing plate supporting a lock-pin in an elongated slot, said lock pin displaceable within said slot between a locked position and an unlocked position.
13. The assembly of claim 12 wherein said lower quadrant disc includes a first thrust shoulder adapted to unlock said slide-pin subassembly from said first position and a second thrust shoulder adapted to unlock said slide-pin subassembly from said second position.

14. The assembly of claim 13 wherein said lower quadrant disc includes a cammed surface disposed between said first and second thrust shoulders for engaging said lock pin when said lock pin is in said unlocked position.

15. The assembly of claim 12 wherein said engagement edge of said recliner disc includes a first locking shoulder adapted to lock said slide-pin subassembly in said first position and a second locking shoulder adapted to lock said slide-pin subassembly in said second position.

16. The assembly of claim 15 wherein said engagement edge includes a void edge for receiving a portion of said slide-pin subassembly when said lock pin is in said unlocked position.

17. The assembly of claim 12 wherein said lock-pin is in constant engagement with said lower quadrant disc.

18. The assembly of claim 12 wherein said lock-pin has a generally octagonal cross-section.

19. The assembly of claim 12 wherein said slide-pin subassembly includes a roller bearing engaging said engagement edge of said recliner disc.

20. The assembly of claim 11 wherein said lower quadrant disc further includes an arcuate cavity receiving a stop pin attached to said slide-pin subassembly, said stop pin adapted to engage a first end of said cavity when said slide-pin subassembly is in said first position and a second end of said cavity when said slide-pin subassembly is in said second position.

21. The assembly of claim 11 further comprising a seat pivot supporting a front side of said seat bottom for approximately 180° pivotal displacement.

22. The assembly of claim 11 wherein said seat bottom includes a bottom surface and a top surface, said top surface adapted to be exposed in a seating position and said bottom surface adapted to be exposed in a load floor position.